



Drilling News of Interest:

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The Silent Killer: Electrical Shock

By Joseph Hogan, The Hartford

Electrocutions are the leading cause of on-the-job fatalities in the water well industry.

We tend to focus on electrical shock injuries from the drill mast or pump-pulling boom making contact with overhead power lines. The results of overhead-wire electrical shock can include severe burns, fire, and even death. Unless there is electrical arcing, the high voltage shock injuries are usually incurred suddenly and silently.

Electrical hazards in the well house are frequently overlooked or forgotten. Lower voltage electrical shocks can be an even more silent killer than those from higher voltage because of possible delayed body reaction to the shock. Also, lower voltage shock may cause the person's muscles to clamp down on the wire or energized object, causing them to receive a prolonged "locked on" shock if a circuit breaker or ground fault interrupter does not trip to shut off the power. The lower voltage shock usually results in electrical current flowing through body tissue and can result in internal damage that is not immediately apparent. The following is a real-life incident from an NGWA member.

"Our service technician was working alone replacing a submersible pump on Friday morning. He shut the main power double throw pull switch off in the pump room. During pump removal, the submersible cable somehow got tangled and raised the power switch handle. After he got the new pump in the hole, he went to connect the wire nuts on the power supply and got a shock. No burn marks, just "bitten." He completed the job and three others before he began to feel a bit jumpy. He called me, and I recommended that he stop at the local hospital emergency room and get checked out. They did tests and found that his heart was out of rhythm.

"The doctors decided, after hours of checking, to keep him overnight hooked to a monitor for observation. During the early morning hours, his heart went into fibrillation. The monitor alarms sounded, and he was "shocked" to bring his heart back into normal rhythm. Had he not been in the hospital at the time of the attack, he might not have survived the wait for the ambulance. He could have just died in his sleep."

The preceding is a testimonial to how silent and deadly a killer electrical shock can be. It hits when not expected and, in cases like this one, the real damage to the heart or internal tissue may not become apparent until much later. In this case, the employee was alone when shocked. He was very fortunate that his heart did not go into immediate fibrillation in the well house where no medical help was available.

Take the time to ensure that your employees know and understand the electrical hazards they may encounter. Safety training is a better investment of your time than attending funerals.

Source: *Tailgate Talk*, Fall 2002

Board Meeting

The next scheduled meeting of the Kentucky Water Well Certification Board will be Mar. 21, starting at 9 a.m. at the Division of Water in Frankfort.

The meeting will be open to all drillers and the public.

Death of Driller

Michael L. Whitlock 48, of Greenbaum Associates, Inc., Louisville, died of a heart attack Sunday, Dec. 15, 2002. He was a native of Oklahoma who started drilling with his father as a teenager with Ardco Drilling Co. drilling seismic exploration holes.

When working for Hilliard Drilling Co., he relocated to Scottsburg, IN. He had been employed with Greenbaum Associates, Inc., since 1985 and had been a Kentucky certified monitoring well driller since 1991. He leaves a wife, four children and three grandchildren. "He was greatly loved and respected by all who knew him," said Sandor R. Greenbaum of Greenbaum Associates.

Our sympathy goes out to Mr. Whitlock's family.

What Do I Do If The Well Tag Is Missing?

Recently, several batches of monitoring well records have been submitted for which new state ID (AKGWA) numbers were assigned merely because the well itself was missing its tag. Several of these well records had the original state ID number enclosed - either on a photocopy of a well inspection form or written by hand ("well was converted and given a new ID# on 10-24-02," etc.).

Please do not retag an existing well unless all efforts to determine the original state ID number have been exhausted. Please also do not assign a new state ID number to a well that is merely being reworked or altered. This leads to duplicates in the database. If you cannot find information to determine the original state ID number, please contact me either by phone at (502) 564-3410 x534 or by e-mail at jo.blanset@mail.state.ky.us. I will be glad to provide this information to you from the database.

When you contact me, the information I will need to locate the well state ID (if it exists) are:

- Quadrangle
- County
- Owner Name (and previous owner if applicable and/or known)
- Owner's Site ID number (MW-1, etc.)
- Depth (if known)

If the well has an existing state ID number but it is not marked on the well, there are two options for attaching the information:

- 1) A sharpie pen works well on the cap or casing.
- 2) Metal tags are available. A standard ball point pen will make an impression in the metal, which can then be attached to the well.

Also - please be sure to attach the state ID sticker to the monitoring well record before submitting it to us. There have been a few lately that weren't attached and managed to find their way to a well record for a completely different site. If you lose the sticker, please mark the state ID number down somewhere so that if it is found you can send it to me directly and avoid having it assigned to a different well location.

Please help us to keep the database consistent. This will help save you time and mounds of paperwork later should you be the one contracted to do the abandonments!

Jo Blanset, Groundwater Branch

Groundwater Protection Plans

Groundwater Protection Plans (GPP) for domestic wells, septic systems and monitoring wells are available to drillers. They can be located on the Groundwater Branch's Web site at: <http://water.nr.state.ky.us/dow/dwgr.htm> or by contacting Pat Keefe at (502) 564-3410, Ext. 445



Workshop Reminders

Personnel from the Division of Water's Groundwater Branch will again be in attendance at this year's Kentucky Ground Water Association's Workshop and Trade Show. Training cards will be distributed to certified drillers when they sign the register at the Division of Water's table.

When taking the National Ground Water Association Exams, you will need to have a check or money order for the exact amount made payable to the National Ground Water Association for their exams. No cash will be accepted for these exams. If you would like, you can choose to take the exams and send payment later. The exams will not be graded until payment is made. Each exam is \$30.

If you need to pay an application fee of \$25, or the state exam fee of \$40, you will need to have the exact amount of cash or have a check or money order made payable to the Kentucky State Treasurer. The Kentucky Water Well Exam is covered under the \$40 state fee.

If you have any questions, please call Harold Lee or Joe Moffitt at (502) 564-3410.

Training Opportunities

Virginia Water Well Association Annual Meeting

Roanoke, VA

Feb. 20—22, 2003

For information: Phone (540) 740-3329

Tennessee Water Well Association Meeting

Gatlinburg, TN

March 27—30, 2003

For information: Phone (423) 357-0815

Illinois Association of Ground Water Professionals Annual Meeting and Expo

Rockford, IL

Feb. 21—22, 2003

For information: Phone: (800) 990-2209

In order to use training other than the Kentucky Ground Water Association's Annual Driller's Workshop, you MUST contact Joe Moffitt, Harold Lee or David P. Leo at the Groundwater Branch. Phone: (502) 564-3410.

Kentucky Ground Water Association 18 th Annual Workshop and Trade Show

Holiday Inn South, Louisville, KY

March 6—7, 2003

For information contact:

Kentucky Ground Water Association

P.O. Box 991

Mayfield, KY 42066

Phone: (270) 251-3004

Remember to obtain proper attendance documentation when attending any training for your continuing training requirement. This includes a signed certificate, training card or letter along with an agenda.

Call Before You Dig

Kentucky Underground Protection, Inc., is a nonprofit organization established to provide a communication link between excavators and operators of underground utilities.

KRS 367.4901 to 367.4917 requires that you call two business days before you dig in the state of Kentucky.

The toll free number to call is:

1-800-752-6007

In Louisville, (502) 266-5123



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Visit the Groundwater Branch page on the Internet at:

<http://water.nr.state.ky.us/dow/dwgr.htm>

E-mail: Harold.Lee@mail.state.ky.us



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